DOCUMENT RESUME

ED 243 996 UD 023 493

AUTHOR White, Arden
TITLE Women and Educational Journalism: A Ten-year Perspective and Comparisons with Journals from Two Related Fields.
PUB DATE [83]
NOTE 18p.; Paper presented at the Northern Rocky Mountain Educational Research Association Annual Meeting (1st, Jackson Hole, Wyoming, October 13-15, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Authors; Counseling; Education; Educational Research; *Females; Psychology; Publications; *Scholarly Journals; *Sex Differences
IDENTIFIERS *Editorial Boards

ABSTRACT

Women's experiences on the editorial boards of and as authors for education journals are examined and compared with their experiences in counseling and development journals and psychology journals. In all cases, women are found to be underrepresented. After a productivity comparison between men and women, and an analysis of women's editorial board and authorship experiences, a discussion of possible reasons for the discrepancy between the male and female experience is presented. Data used in the analysis are provided in tabular form. (CMG)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED243996

Women and Educational Journalism: A Ten-Year Perspective and Comparisons with Journals from Two Related Fields

by
Arden White
University of Wyoming
Laramie, Wyoming 82071

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Arden White

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

UD 023 493

Women and Educational Journalism: A Ten-year Perspective and Comparisons with Journals from Two Related Fields

Substantial differences between men and women in both writing and editorial board experiences in several fields related to education have been noted by a number of writers. Champagne and Klopfer (1977) reported data for the first 60 years of Science Education which show that women wrote 17% of 2787 articles identifiable by sex of author. They calculated authorship by sex for each volume and discovered the median for all 60 years was 13%. Percentages of female authorships were less in later volumes than in earlier volumes. Assuming influence in a field is positively associated with writing productivity, they suggested that women seemed to be having less influence with the passage of time. Horrocks & Hoga (1973) studied articles appearing in the Journal of Genetic Psychology for the period 1945-1969. Percent of contributions by women consistently decreased until 1965 when an increase appeared. In the period 1945-49, 32.1% of contributing authors were female but in 1960-64 the percentage had fallen to 15.4. For the last period studied, 1965-69, the percentage was 23.8. Tryon (1981a) studied the Journal of Consulting and Clinical Psychology for the period 1969-1979. Women were publishing in proportion to their membership in Division 12 of the American Psychological Association. However, they were publishing at a lower rate than their percentage among PhD clinicians in 1979. For the Journal of Counseling Psychology also for the period 1969-1979, Tryon (1981b) found women had a substantially higher percentage of authorships at the end of the decade. They were publishing at a higher percentage than their membership in Division 17 of APA. However, they were publishing at a rate approximately two-thirds the percent of doctorates earned by women in the middle 1970's.

Smith (1974) reported a cumulative index for The Journal of General Education for the first 25 volumes covering the period 1946-47 through 1973-74. A frequency tally of names only for those that could be identified unambiguously by sex showed 7% were female. Crabbs and Crabbs (1983) studied volumes 18-27 (1970-79) of the School Counselor . Of 763 authors identified by sex, 25.0% were female. Women had written 32.3% of 505 book reviews identifiable by sex of writer. Membership in the American School Counselors Association identifiable by sex showed 62.6% were female. Women appeared to be writing book reviews at a rate about one-half that of their professional membership representation and were authors at a rate of about 40%. Studying Counselor Education and Supervision senior author experience, White (1983) found women virtually tripled their authorships between volume 1 and volume 21. A senior author is defined typically as a single author or the first when two or more are listed. Women were listed as senior authors about as frequently as might be expected compared to sex proportions in a sample of counselor educators, and close to the 36.3% female membership in the Association for Counselor Education and Supervision, as well.

These studies can be taken to indicate that women have been underrepresented historically as writers in several fields. Some change has occurred in the last decade, but are women involved in educational journalism proportionate to their memberships in various components of the field? The research reported here bears on this question.

Productivity Comparisons between Women and Men

Several studies have been reported in which productivity comparisons were made between women and men. Guyer and Fidell (1973) found little support for overall differences, although women in the two highest levels of academic appointment had been publishing less than men. However, several

other writers have reported rather different findings. Comfort, Bowen and Gansneder (1974) found that for five journals from the early 1970's related to education, 81% of senior authors were male. Egelston (1976) selected the June, 1972, through May, 1973, period for the Phi Delta Kappan and was supplied data for submitted manuscripts. Of 768 listed authors, 9.5% were female. Women obviously were not submitting manuscripts to this journal at a rate approximating even the most conservative of populations one might use for comparing experiences between men and women. Hamovitch and Morgenstern (1977) asserted that women in higher education appear to publish at a rate about 20% less than men. They also noted that the observed differences were not directly attributable to such factors as child rearing or marital status. Mackie (1977) selected 15 journals related to sociology and calculated female authorship percent for 1967 and 1973. Women were listed as 11.5% of the authors in 1967 and as 17.5% of the authors in 1973. This change was judged to be statistically significant. One might note that even the latter percent is very small on an absolute basis.

Tryon (1981c) studied the Journal of College Student Personnel for 1974 and 1979. Female authorship rose 15% (from 17% to 32%). In 1977 women accounted for 46.7% of the membership in the American College Personnel Association with which the journal is closely affiliated. Apparently the substantial shift in author percent only narrowed the gap between professional association membership and writing productivity. Helmreich, Spence, Beane, Lucker and Matthews (1980) studied productivity of persons in psychology and concluded that men were significantly more productive, both in terms of publications and in citations thereof. Fenner (1972) discussed several aspects of women in educational journalism, mostly related to Today's Education: NEA Journal experience. For both solicited and unsolicited manuscripts, men exceeded women. Fewer than half of the unsolicited manuscripts came from women.

A few writers also have considered "most prolific writers" associated with a journal. Yungman (1972) found that for the first 19 volumes of the Vocational Guidance Quarterly 14 people had written five or more articles each. Of 92 articles, 82 were by 12 men, and 10 were by two women. Darr (1980) studied volumes 1-15 of the Journal of Employment Counseling, defining "leading" authors as those who had written four or more articles. Of 66 articles, 10 men wrote 53 and 3 women wrote 13. Cox (1977) studied the Journal of Applied Psychology for the periods 1949-52 and 1970-74. Five authors were identified in the first period and nine in the second as having the most numerous publications; none was female. Walton (1982) studied scholarly productivity among counselor educators and concluded that proportionately more men than women were high producers. Over (1982) found sex differences in productivity among academic psychologists even when samples were matched for specialization. An interesting difference depends on the relationship of productivity and citation of work. As might be expected, most psychologists tend to be "silent," producing few works and being cited infrequently (70.20% for men; 76.26% for women). The "prolific producer" produces large numbers of works that also are frequently cited. In the Over (1982) study, 6.57% of the men and 2.02% of the women occupied this category. A "perfectionist" is defined as one who has few publications but frequent citations; 5.05% of the men and 10.61% of the women were so classified. Lastly, the "mass producer" was defined as producing many works that were infrequently cited. Of the men studied, 18.18% were so classified, while only 11.11% of the women were so classed. Evidently women tend to be rather more demanding of themselves thus producing fewer works, and thus being overall less proportionately prolific. These data seem to

afford the speculation that women are more 'quality conscious' than men, whether suitably so or not, with a major result being that that they garner less publication visibility than do men.

Editorial Board Experience

Editorial board experience has been noted by several writers including Fenner (1972) who studied more than 100 education periodical mastheads. Of the top editors, 22% were women. Teghtsoonian (1974) studied a number of journals in psychology and discovered that the percent of female editors varied between 4.3% in 1970 and 6.0% in 1972. For principal and associate editors in total years of service (120) only one year was accounted for by a woman. Benedek (1976) solicited information from 53 journals in psychiatry and related fields and received 37 replies; 3 had a female principal editor. Most of these editorial boards were reported as having mostly male members. Over (1981) did a replication of the Teghtsoonian (1974) study, using data from 14 psychology journals in 1977. The percentage of women on editorial boards more than doubled, overall. White (1983) found that in the 21 years Counselor Education and Supervision has been published, 63 men and 22 women have served on the editorial board.

Although somewhat mixed and varying among fields and journals, data seem to indicate women have tended to be under-represented as authors and as members of editorial boards with some improvement in the last 10 years. To extend information to education, 22 education journals were selected for study. They were chosen by browsing the stacks of the writer's home institution library, with selections made mainly to reflect subjects having large numbers of teachers and some 'co-curricular' areas. Subject areas known to be heavily male or female in instructor proportions, such as vocational agriculture, home economics and administration, were not selected. The intent was to assemble a number of journals that would broadly represent instructional aspects of education and be somewhat comparable with journals previously studied. The 22 journals selected are shown in Table 1, with percentages of women on editorial boards and as senior authors for 1972, 1977, and 1982. Those time periods were chosen to afford comparison with psychology journals studied by Teghtsoonian (1974) and Over (1981). In addition, as a basis for further comparisons, the writer also studied 10 counseling and development journals, using volumes from the same times.

Education Journal Experience

All but one the journals experienced an increase in percentage of women. The median for all 22 journals increased from 12.5% to 31.3% or a change of almost 2.5 times. Articles with women as senior authors also increased in the 10 years. The median in 1972 was 17.6%; in 1982 it had risen to 28.1%. All 22 journals showed an increase during the decade.

Science Education contained summaries of research in science education published in 1977 and 1982. Senior author counts done by the present writer yielded these percents of articles by women: 19.3 in 1977 and 25.0 in 1982. Apparently articles with women as senior author were appearing more frequently elsewhere than in Science Education. The Mathematics Teacher contained lists of referees for 1972, 1977 and 1982. Percents of women calculated by this writer were found to be 10.4, 21.4 and 31.2. These percents closely approximate those for editorial board membership for the latter two time periods, indicating women were becoming substantally more involved in both forms of editorial work with that journal.

A crucial aspect becomes interpretation of percentages. Increases

taken alone could be interpreted as indicative of substantial improvements in the experiences of women. Indeed, they do serve to show that women have been meeting with somewhat greater success. But whether these improved percentages in 1982 indicate an approach to 'equity' depends on the selection of a 'baseline' with which to compare both editorial board and senior author data. Teghtsoonian (1974) suggested that a ratio of editorial board percentage divided by senior author percentage would reflect the degree to which women were suitably represented on editorial boards of psychology journals. Similarly, comparing both of these percentages with the percent of women in a field, such as psychology or education, would provide another basis for estimating the relative participation experience of women in a field.

One such figure would seem to be the number of earned degrees conferred on women at some juncture. Unless the percentage has shifted drastically, then a figure chosen to reflect recent experience would seem to be sound. However, whether the choice should be doctorate or master's degrees can be argued various ways. Another figure that could be used, if available, is the percent of women in an associated professional organization. However, data from a sample of teachers prepared by Gardner (1982) show that women in education do not join associated professional organizations in as high a proportion as do men. Whereas women and men tend to join the N.E.A and A.F.T. and state and local associated organizations in about equal percentages, 44.5% of men in 1981 indicated they were members of professional or subject-related organizations. Women indicated a 33.4% membership.

Recognizing that difficulties will be associated with any base figure chosen, ratios were computed for the 22 education journals from the percent of doctorates earned by women in 1979-80, as reported by Grant and Eiden (1982). Equity ratios in Table 1 were formed by dividing the editorial board percentage and the senior author percentage, respectively, by the earned doctorate percentage shown. Had the denominator chosen been the percent of master's degrees earned by women, the ratios would have been much smaller. Even with the assumption that most writers are from the ranks of those holding doctorate degrees, women generally appear to be underrepresented both on editorial boards and as senior authors. The ratio exceeded 1.00 for only three of the 22 journals, as was true also for the senior author experience.

For some perspective on these findings, they can be compared to data collected in a similar fashion for journals in psychology and journals in counseling and development. These comparative data were available from two projects the present writer did. Means and standard deviations of percentages of women on editorial boards and as senior authors for these three fields appear in Table 2.

These descriptive statistics show in general that editorial board participation increased in education and psychology quite substantially. Almost no change occurred among the 10 counseling and development journals but they also had the highest participation rate in 1972. And whereas for the 14 psychology journals the relative change was the greatest, the percent of participation was least throughout, with no increase in the last five years. Senior authorship experience was somewhat different. All three groups of journals showed large increases, with education journals having the greatest percentage in 1972 and in 1982, but the least relative amount of change, increasing by a factor of only about .5, whereas the increase in the other two areas was by a factor of about 2.00. If one is willing to trust the robustness of a one-way analysis of variance, and assume further

that percentages, derived as these were, are at all amenable to this analysis, then all editorial board F-ratios can be regarded as significant at .05. That is, a difference among the means is present, and clearly the psychology journal means fall below the means of the other two groups. Doing the three analyses for senior author percentages yields a different finding, however. None of the F-ratios is significant.

The sex equity ratios formed by dividing the editorial board and senior author percentages by the doctorates conferred percentage also could be subjected to a 1 x 3 analysis of variance, using 1982 journal experience and data for doctorates conferred in 1979-80. Doing so reveals an F-ratio for senior author experience of 0.3467 which is clearly not significant, but an F-ratio of 4.2190 for editorial board experience, which can be regarded as significant at .05. Calculation of the Kruskal-Wallis statistic (Bradley, 1968) yields H statistics of 1.26 and 8.68, which evaluated via a chi-square table produce identical findings, indicating a high congruence between the analysis of variance procedure and a non-parametric procedure.
Illustrative of the importance of the 'baseline' or denominator variable in making comparisons, changing the divisor to percent of divisional membership for both counseling and development and psychology journal sets produces the reverse results. That is, the analysis of variance and Kruskal-Wallis values for editorial board experience become not significant, but significant for the senior author experience. The reason is due to the much smaller percent of divisional participation than doctorates earned experience for women in the two comparison fields, and particularly so in psychology. Unfortuately, no ready professional or subject area particiation data can be associated with many of the 22 journals in education selected for this study.

Some Additional Data

Teghtsoonian's (1974) analysis of 14 psychology journals revealed that in the early 1970's women in psychology were underrepresented on editorial boards, judging from the difference in percentages of women on boards and women who were senior authors of articles in those same journals. Data collected by Over (1981) revealed that much of the relative dearth of women on editorial boards of those same journals had been erased by 1977. However, data the present writer collected revealed that by 1982 little further change had occurred. In order to afford a parallel comparison, sex equity ratios were calculated for all 22 education journals for 1972, 1977, and 1982. For the 1972 data, 11 ratios exceeded 1.00, indicating one-half of the journals had a higher percentage of women on boards than were senior authors. By 1982, 13 ratios exceeded 1.00. A similar pattern was found for the 10 journals in counseling and devlopment. By contrast, in 1972 only one of 14 psychology journals had this ratio over 1.00, and only one in 1982. Among several possible interpretations, one that should be considered is that women in education simply are not writing as much, or if so, are being less successful than men. An interpretation that in part seems to be satisfied by the data is that women in psychology experience relatively more difficulty in becoming members of editorial boards compared to education and counseling related journals.

However, becoming the editor of a journal in any of the three fields apparently is even more difficult. Twelve of the 22 education journals were checked for women listed as the editor in the three time periods. Of 38 names reasonably classifiable as to sex, two were female. This 5.3% is similar to those found for both the psychology and the counseling and development journals. Apparently women are having substantially less success than their numbers would suggest in being named editors of journals

in all three fields.

Some further data related to women's experience compared to those for men, coming from responses to an N.E.A. questionnaire sent to teachers (Gardner, 1982), suggest that women have a number of variables present that do not impinge on men. For example, 27.9% of the men reported 20 or more years of full-time teaching experience; women reported 18.8%. Service breaks were reported by 37.5% of the women; only 16.0% of the men indicated their teaching careers had been interrupted. Men reported larger percentages of service breaks due to further study, employment outside education, and employment in another position within education. Apparently women are not promoted proportionately as frequently as men. Even though a higher percentage of them reported earning college credit, they evidently did so more frequently on a part-time basis. Service breaks due to marriage, homemaking, maternity and child rearing and because of a spouse move were reported by 30.3% of the women; no men reported such a service break. These respondents also indicated 88.0% of their supervising principals were men. Although these data are somewehat peripheral to the major theme of this article, they do suggest some of the bases for the differential experiences women and men have in educational journalism.

Discussion and Speculation

Data from previous studies and as assembled for this study seem to indicate women have experienced considerable adversity in becoming members of editorial boards in their chosen fields. They appear also to have an underrepresentation as senior authors. Fenner (1972) asserted that women do not write as much as men. They also do not pursue advanced degrees in the same percentages as those who complete bachelor's degrees. The decrement is particularly noticeable for doctorate degrees. As a part of the data collection for this study, data were abstracted from Grant and Eiden (1982) showing earned degrees at bachelor's, master's and doctorate levels. In 1949-50, women earned 48.9% of bachelor's degrees conferred in education, and 36.7% of those conferred in psychology. Doctorate percents were 16.37 and 14.84, respectively. By 1979-80, women were earning 73.8% of bachelor's degrees in education, and 63.2% of those in psychology. Doctorate percentages were 44.2 and 42.1, respectively. Obvious gains have occurred in these 30 years. If one is willing to assume that the bulk of writing effort will occur among those having advanced degree preparation, and particulaly among those having the doctorate, then the disparity between men and women becomes particularly significant. Several fields in addition to education were checked and in all instances but one (that at the master's level in Letters) women earning advanced degrees showed a decrement over the percentage of women earning bachelor's degrees. Education is no exception. Using data reported in Grant and Eiden (1982), percentages for several sub-fields in education were computed, and decrements noted. As might be expected, decrements between master's and doctorate degrees were particularly large. For 11 sub-fields, including those used in forming Table 1 above and adding student personnel, the mean doctorate from master's decrement as a percent of doctorates earned was found to be 43.28. For comparison, 14 fields from agriculture to social science, including engineering, mathematics, library science, home economics and health professions, revealed a mean decrement of 59.2. Although the loss is less in education, it nevertheless is very substantial. Apparently women experience a different environment than do men in pursuing advanced degrees. They either elect in larger numbers than men to terminate education at lower levels or do not complete programs if started.

However, circumstances impinging on women and not on men, and others

impinging differently on women than on men, may be involved. Shapley (1975) discussed women's experiences regarding preparation for and entry into the sciences. Development of interest, and getting the necessary education, appear to be different for women than for men. Women appear not to have the same access to the informal network of inter-relationships from which upward mobility is one product and which may lead to recognition and further opportunity. Kjerulff and Blood (1973) conducted a well conceived study to compare communication experiences of male and female graduate students. They found that women appear to be less free to pursue discussions about research outside of the office context. Although women talked more than men with other graduate students, they talked less with advisers. They tended to miss out on informal discussions, and may have had less opportunity to develop an identification with the field. Goldstein (1979) found samples of students who had an adviser of the opposite sex, for both men and women, and compared them with samples of students who had a same-sex adviser. Scholars in the same-sex conditions published significantly more than did the cross-sex subjects. Given that female role models and mentors in higher education are relatively scarce, this situation if typical and pervasive helps explain why women publish less, and possibly why they may pursue advanced degrees in fewer numbers than men.

That discrimination has occurred also can not be ignored. Astin and Bayer (1972) were able to show that differences in promotion experience occurred not attributable to between sex research or teaching variables. Blackburn, Behymer and Hall (1978) indicated that what may seem on the surface to be sex differences in productivity can be explained better as due to a variety of variables other than sex per se that correlate with productivity. They concluded that differences are probably attributable to discrimination in some forms or types that has resulted in women working in less prestigious graduate schools, which then keeps them from the more favorable universities for work, which usually leads to heavier teaching loads of undergraduates, etc. One might also observe that in the 'publish or else' environment typical of universities currently, faculty therein, more heavily male than in 'teaching emphasis' institutions, are in a situation likely to lead to more manuscript submissions, and presumably to more publications.

But women may differ on somewhat more positive bases as well. Heckman, Bryson, and Bryson (1977) studied 200 couples who had answered a questionnaire from a larger study of American Psychological Assocation members who had claimed wife-husband credit. Few instances of explicit sexual discrimination were reported. The reasons for the women having poorer career performances than their husbands appeared to be complex. Women seemed to place careers secondary to family needs and to the husbands' career needs. In a very well documented article, Reskin (1978) developed data from 78 references in discussing major environmental, inter-personal circumstances and situations that appear to result in pervasive disadvantages for women in preparing for, entering, and competing thereafter in various sciences. Women appear to have been particularly disadvantaged with regard to access to informal information, resources and opportunities for research program development.

Apparently women in education have not been free of the situations and circumstances, not clearly known, and certainly not at all well understood, which have resulted in a substantially less favorable experience than men both in publication success and in opportunities to be influential through editorial board involvement. What is not known so well is whether women have made efforts in the same amounts as men, or whether they have invested

their efforts in other endeavors. Enough information has been collected to suggest that differences can not be explained solely with the argument that women must have elected to invest their efforts differently then men. Some further investigation of what women currently are attempting to do, and why, appears to be needed. As with most other aspects of human behavior, whether between the sexes or otherwise, accurate explanations, if and when developed, are likely to indicate a far more complex interaction of both volitional and non-elective variables than so far has been only hinted at.

by
Arden White
University of Wyoming
Laramie, Wyoming 82071

References

Astin, H.S. & Bayer, A.E. (1972). Sex discrimination in academe. Educational Record, 53, 101-118.

Benedek, E.P. (1976). Editorial practices of psychiatric and related journals: Implications for women. American Journal of Psychiatry, 133, 89-92

Blackburn, R.T., Behymer, C.E., & Hall, D.E. (1978). Research notes: Correlates of faculty publications. Sociology of Education, 51, 132-141.

Bradley, J.V. (1968). Distribution-free statistical tests. Englewood Cliffs, N.J.: Prentice-Hall.

Champagne, A.B., & Klopfer, L.E. (1977). A sixty-year perspective on three issues in science education: I. whose ideas are dominant? II. representation of women. III. reflective thinking and problem solving. Science Education, 61, 431-452.

Comfort, R.E., Bowen, L.S., & Gansneder, B.M. (1974). Who's writing about what in education's major journals? Educational Leadership, 31, 663-667.

Cox, W.M. (1977). Some changes in articles published in the Journal of Applied Psychology during a twenty-year period. Journal of Applied Psychology, 62, 241-244.

Crabbs, M.A., & Crabbs, S.A. (1983). A decade in review: sex, work setting, and regional affiliation of contributors to the School Counselor. School Counselor, 29, 175-182.

Darr, J.T. (1980). Article characteristics, content, and authorship in the Journal of Employment Counseling. Journal of Employment Counseling, 17, 261-269.

Egelston, J.C. (1976). Sex bias in publications and grant awards. Journal of NAWDAC, 39, 66-69.

Fenner, M.S. (1972). Women in educational journalism. Contemporary Education, 43, 209-213.

Gardner, S. (1982). Status of the American public school teacher, 1980-81. Washington, D.C.: National Education Association.

Goldstein, E. (1979). Effect of same-sex and cross-sex role models on the subsequent academic productivity of scholars. American Psychologist, 34, 407-410.

Grant, W.V., & Eiden, L.J. (1982). Digest of education statistics, 1982. Washington, D.C.: National Center for Education Statistics.

Guyer, L., & Fidell, L. (1973). Publications of men and women psychologists: Do women publish less? American Psychologist, 28, 157-160.

Hamovitch, W., & Morgenstern, R.D. (1977). Children and the productivity of academic women. Journal of Higher Education, 48, 633-645.

Heckman, N.A., Bryson, R., & Bryson, J.B. (1977). Problems of professional couples: A content analysis. Journal of Marriage and the Family, 39, 323-330.

Helmreich, R.L., Spence, J.T., Beane, W.E., Lucker, S.W., & Matthews, K.A. Making it in academic psychology: Demographic and personality correlates of attainment. Journal of Personality and Social Psychology, 39, 896-908.

Horrocks, J.E., & Hogan, J.D. (1973). A survey and interpretation of article characteristics: The Journal of Genetic Psychology 1945-1969. Genetic Psychology Monographs, 87, 3-31.

Kjerulff, K.H., & Blood, M.R. (1973). A comparison of communication patterns in male and female graduate students. Journal of Higher

Education, 44, 623-632.
Mackie, M. (1977). Professional women's collegial relations and productivity: Female sociologists' journal publications, 1967 and 1973. Sociology and Social Research, 61, 277-293.
Over, R. (1981). Representation of women on the editorial boards of psychology journals. American Psychologist, 36, 885-891.
Over, R. (1982). Research productivity and impact of male and female psychologists. American Psychologist, 37, 24-31.
Reskin, B.F. (1978). Sex differentiation and the social organization of science. Sociological Inquiry, 48, 6-37.
Shapley, D. (1975). Obstacles to women in science. Impact of Science on Society, 25, 115-123.
Smith, J.B. (1974). JGE: The Journal of General Education cumulative index by authors volume 1 (1946-47)—volume XXV (1973-74). Journal of General Education, 25, 293-312.
Teghtsoonian, M. (1974). Distribution by sex of authors and editors of psychological journals, 1970-72: Are there enough women editors? American Psychologist, 29, 262-269.
Tryon, G.S. (1981a). Publication records of women clinicians in the Journal of Consulting and Clinical Psychology. Journal of Consulting and Clinical Psychology, 49, 974-976.
Tryon, G.S. (1981b). Publication records of women counselors during the past decade. Journal of Counseling Psychology, 28, 184-186.
Tryon, G.S. (1981c). Women's publication record in the Journal of College Student Personnel over a five-year period. Journal of College Student Personnel, 22, 261-263.
Walton, J.M. (1982). Research activity and scholarly productivity among counselor educators. Counselor Education and Supervision, 21, 305-311.
White, A. (1983). Counselor Education and Supervision: 21 years and a few surprises. Counselor Education and Supervision, 22, 263-274.
Yungman, G.T. (1972). Content analysis of the Vocational Guidance Quarterly: volumes 1-19, inclusive. Vocational Guidance Quarterly, 20, 193-198.

Table 1. Women's experience on editorial boards and as senior authors, in percent, for 22 journals in education, 10 journals in counseling and development, and 14 journals in psychology in 1982, with sex equity ratios based on percent of doctorates in related areas conferred in 1979-80.

Journal	Percents			Sex Equity Ratios	
	Ed. Bd.	Sr. Auth.	Doct.	Ed. Bd.	Sr. Auth.
Comparative Ed. Rev.	18.2	19.0	44.3	0.4108	0.4288
Education Digest	33.3	24.7	44.3	0.7516	0.5575
Education Forum	28.6	20.3	44.3	0.6455	0.4585
Ed. Research Quart.	33.3	31.8	44.2	0.7533	0.7194
Educational Studies	33.3	25.0	44.3	0.7516	0.5643
Elem. School Jour.	57.1	43.5	64.0	0.8921	0.6796
Harvard Ed. Rev.	70.0	32.7	44.3	1.5801	0.7381
Jour. Ed. Meas.	33.3	23.3	41.7	0.7985	0.5587
Jour. Ed. Research	28.9	38.8	44.2	0.6538	0.8878
Jour. Exper. Ed.	17.9	31.4	48.5	0.3690	0.6474
Jour. Higher Ed.	9.3	30.8	40.1	0.2319	0.7680
Physical Educator	29.4	28.6	40.8	0.7205	0.7009
Read. Res. Quart.	27.9	27.6	72.6	0.3842	0.3801
Reading Teacher	50.0	58.4	72.6	0.6887	0.8044
Ed. & Urban Society	0.0	11.1	44.3	0.0000	0.2505
Language Arts	83.3	75.4	72.6	1.1473	1.0385
Math. Teacher	33.3	23.1	39.5	0.8430	0.5848
Music Ed. Jour.	33.3	35.2	30.5	1.0918	1.1540
Psych. in the Schools	8.1	26.4	51.7	0.1566	0.5106
School Arts	33.3	56.3	53.7	0.6201	1.0484
Science Education	25.0	10.8	31.5	0.7936	0.3482
Science Teacher	26.1	19.7	31.5	0.8285	0.6253
Pers. & Guid. Jour.	20.6	34.0	45.6	0.4517	0.7456
Voc. Guid. Quarterly	38.9	39.0	45.6	0.8530	0.8552
Jour. Coll. Stu. Pers.	50.0	33.6	45.6	1.0964	0.7368
Couns. Ed. & Super.	28.1	22.2	45.6	0.6162	0.4868
School Counselor	40.0	39.2	45.6	0.8771	0.8596
Elem. Sch. Guid. & Couns.	42.9	27.8	45.6	0.9407	0.6096
Meas. & Eval. in Guid.	16.7	10.3	45.6	0.3662	0.2258
Jo. Human Ed. & Devel.	23.1	20.0	45.6	0.5065	0.4385
Rehab. Couns. Bulletin	5.0	24.4	45.6	0.1096	0.5350
Jour. Employ. Couns.	22.2	30.0	45.6	0.4868	0.6578
Developmental Psych.	30.8	44.9	42.1	0.7315	1.0665
Jour. Abnormal Psych.	15.2	24.1	42.1	0.3610	0.5724
Jour. Applied Psych.	12.0	12.1	42.1	0.2850	0.2874
Compar. & Physio. Psych.	3.7	20.0	42.1	0.0878	0.4750
Consult. & Clinic. Psych.	9.9	19.1	42.1	0.2351	0.4536
Jour. Couns. Psych.	28.6	28.9	42.1	0.6793	0.6864
Jour. Educ. Psych.	32.7	25.9	42.1	0.7767	0.6152
Jour. Exper. Child Psych.	14.8	46.3	42.1	0.3515	1.0997
Jour. Res. in Personality	7.7	19.0	42.1	0.1828	0.4513
Exper. Social Psych.	7.4	22.9	42.1	0.1757	0.5439
Personality & Soc. Psych.	22.4	23.4	42.1	0.5320	0.5558
Exper. Analysis of Behav.	15.2	16.4	42.1	0.3610	0.3895
Verb. Lrng & Verb. Behav.	13.8	29.2	42.1	0.3277	0.6935
Percept. & Psychophysics	16.2	18.4	42.1	0.3847	0.4370

Note: Doctorate percents were taken from Grant and Eiden (1982) using a single entry or combination of entries most closely associated with the apparent content of the journal.

Table 2. Analysis of variance of sex equity ratios based on percents of women as senior authors and on editorial boards for journals in education, counseling and development and psychology, with ratios formed from percent of doctorates earned by women in 1979-80.

Category	Means			standard deviations		
	Educ.	Couns.	Psych.	Educ.	Couns.	Psych.
Senior Author	0.6569	0.6150	0.5948	0.2320	0.1990	0.2348
Editorial Board	0.6992	0.6304	0.3901	0.3403	0.3042	0.2120

Notes: Senior Author F, 2 & 43 df, = 0.3467, n.s.; Kruskal-Wallis H = 1.26, n.s.
Editorial Board F, 2 & 43 df, = 4.2190, $p < .05$; Kruskal-Wallis H = 8.6779, $p < .05$.

Table 3: Women on editorial boards and senior authors, in percent, for 22 selected journals in Education for the years 1972, 1977, and 1982, with two "sex equity ratios".

Journal	Editorial Board			Senior Authors			Sex Equity Ratios for 1982 data (3)			
	1972	1977	1982	1972	1977	1982	Divisor	(A)	(B)	
Ed. Studies	17.9	28.6	33.3	11.1	13.0	25.0	Ed.:70.2	0.47	0.36	
Harvard Ed. Rev.	26.7	47.6	70.0	20.0	9.5	32.7	Ed.:70.2	1.00	0.47	
Jo. Ed. Research	12.5	21.2	28.9	10.2	18.0	38.8	Ed.:70.2	0.41	0.55	
Jo. Exper. Ed.	5.9	0.0	17.9	19.4	10.8	31.4	Ed.:70.2	0.25	0.44	
Jo. Higher Ed.	25.0	9.1	9.3	1.6	4.9	30.8	Ed.:70.2	0.13	0.44	
Education Digest	23.5	17.6	33.3	22.6	31.8	24.7	Ed.:70.2	0.47	0.35	
Comp. Ed. Rev.	0.0	6.7	18.2	12.5	9.5	19.0	Ed.:70.2	0.26	0.27	
Read Res. Quart.	15.4	19.0	27.9	36.8	35.0	27.6	Ed.:70.2	0.40	0.39	
Psych. in Schools	12.5	8.6	8.1	11.1	25.3	26.4	Ed.:70.2	0.12	0.38	
Jo. Ed. Meas.	11.1	22.7	33.3	7.4	3.6	23.3	Ed.:70.2	0.47	0.33	
Ed. Res. Quart.	5.6	33.3	33.3	26.3	34.4	31.8	Ed.:70.2	0.47	0.45	
Ed. Forum	0.0	37.5	28.6	11.5	6.5	24.3	Ed.:70.2	0.41	0.35	
Elem. School Jo.	25.0	xx.x	57.1	22.2	38.8	43.5	Ed.:70.2	0.81	0.62	
Ed. Urban Society	0.0	0.0	0.0	14.8	20.7	11.1	Ed.:70.2	0.00	0.16	
Music Educ. Jo.	10.5	16.7	33.3	24.2	20.9	35.2	Art:53.3	0.62	0.66	
School Arts	38.1	35.7	33.3	54.0	45.7	56.3	Art:53.3	0.62	1.06	
Reading Teacher	55.0	55.6	50.0	26.3	55.4	58.4	Ed.:70.2	0.71	0.83	
Language Arts	66.7	51.3	83.3	57.3	52.9	75.4	Ed.:70.2	1.87	1.07	
Math. Teacher (1)	0.0	28.6	33.3	13.6	19.3	23.1	Math36.1	0.92	0.64	
Science Ed. (2)	0.0	20.0	25.0	7.0	14.5	10.8	Sci.27.8	0.90	0.39	(*)
Science Teacher	26.7	29.2	26.1	13.3	15.8	19.7	Sci.27.8	0.94	0.71	(*)
Physical Educator	14.3	28.6	29.4	22.3	34.7	28.6	Ed.:70.2	0.42	0.41	

Notes: (1) Referees were listed for all three years; percents women are: 1972, 10.4; 1977, 21.4; 1982, 31.2.

(2) Summaries of research in science education were published for 1977 and 1982; senior author counts of references yielded these percents, respectively: 19.3; 25.0

(3) Ratio A = percent women on editorial board divided by percent master's degrees conferred on women in 1979-80;
Ratio B = percent women senior authors divided by percent master's degrees conferred on women in 1979-80.

(*) Average of phys. sci & bio sci. percents.

Table 4: Percent women at three degree levels for 15 selected fields, 1979-80.

Major Field of Study	Degree Level		
	Bachelor's	Master's	Doctor's
Agriculture & Natural Sciences	29.6	22.5	11.3
Biological Sciences	42.1	37.1	26.0
Business Management	33.6	22.3	14.4
Education	73.8	70.2	44.3
Engineering	9.3	7.0	3.8
Fine & Applied Arts	63.2	53.3	36.9
Foreign Languages	75.5	70.2	57.4
Health Professions	82.2	72.3	44.7
Home Economics	95.3	91.3	76.0
Letters	59.3	60.4	40.1
Library Science	95.0	81.3	52.1
Mathematics	42.3	36.1	13.8
Physical Sciences	23.7	18.6	12.4
Public Affairs & Service	54.9	52.1	35.2
Social Science	43.6	36.1	27.1

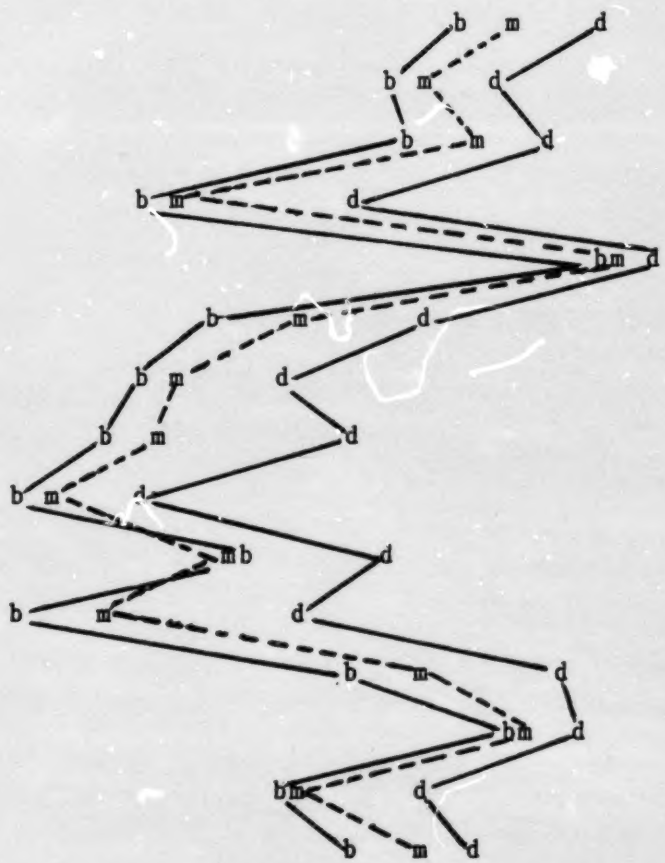
Table 5: Percent of women at three levels of teaching for six time periods.

Level of Teaching	Time Periods					
	1929-30	1939-40	1949-50	1959-60	1969-70	1975-76
Elementary	90.2	78.4	78.8	72.2	68.4	67.2
Secondary	64.8	58.1	56.7	48.2	46.8	46.5
Higher Education	27.8	26.2	23.4	19.3	22.2*	24.2*

*Based on estimated data.

Figure I.: Percent women earning degrees at three levels for 15 selected fields, 1979-80.

Fields of Study	Percent										
	100	90	80	70	60	50	40	30	20	10	0
Agriculture & Nat. Sci.											
Biological Sciences											
Business Management											
Education											
Engineering											
Fine & Applied Arts											
Foreign Languages											
Health Professions											
Home Economics											
Letters											
Library Science											
Mathematics											
Physical Sciences											
Public Affairs & Serv.											
Social Science											



Note: b = bachelor's; m = master's; d = doctor's degrees, respectively